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Lessons 7.4, 7.5 and 7.6
Date: $\qquad$ Hour: $\qquad$
Skills Assessed:
I can choose the best method to solve a system of linear equations.
I can solve a system of linear inequalities by graphing.
I can model a real-life situation using linear systems.
Solve each linear system using the method of your choice. You must show your work! If you choose to use the graphing strategy, please attach graph paper.
1.) $3 x+y=-1$
1.) $\qquad$
2.) $5 x+2 y=-1$
$-3 x+4 y=-15$

$$
\text { 3.) } \begin{gathered}
2 \mathrm{x}-\mathrm{y}=6 \\
y-x=0
\end{gathered}
$$

4.) $x-2 y=5$
$-2 x+4 y=2$
4.) $\qquad$
5.) $3 y=7 x-5$
$13-3 y=2 x$
6.) Your family goes to a Southern-style restaurant for dinner. There are 6 people in your family. Some order the chicken dinner for $\$ 14.89$ and some order the steak dinner for $\$ 17.69$. If the total bill was $\$ 100.54$, how many people ordered each dinner?

## Graph each system of linear inequalities. Show your work when necessary.

7.) $\begin{aligned} y & \leq 4 x+1 \\ y & >-2 x\end{aligned}$

8.) $2 x-5 y>10$ $4 x+y \geq 3$
9.) Write a system of linear inequalities that defines the shaded region.
9.) $\qquad$

10.) You need at least 3 hours to do your English and history homework. 10.) You need to spend at least twice as much time on your history homework as your English homework. It is 12:00 noon on Sunday and your friend wants you to go to the movies at 7:00 p.m. Write a system of linear inequalities that shows the number of hours you could spend doing homework for each subject if you go to the movies and graph the results.


